

REMARKS

Reconsideration and further prosecution of the above-identified application are respectfully requested in view of the amendments and discussion that follows. Claims 1-14 are pending in the prior application.

Rejections Under 35 U.S.C. §103(a)

Claims 1, 2 and 3 have been rejected under 35 U.S.C. §103(a) as being obvious over U.S. Pat. No. 6,730,025 to Platt in view of U.S. Pat. No. 6,603,995 to Carter. In view of the content of the claims as presently amended, applicant respectfully traverses these rejections.

Independent claim 1 has been amended to more clearly claim the invention in the context described in the specification. Support for a portable processing element adapted to identify a QRS complex within raw data collected through the set of relatively short leadwires may be found within the specification a paragraphs [0037] and [0038].

In contrast, Platt and Carter are merely signal acquisition devices. In this regard, Platt explicitly states that "The present invention relates to . . . physiological signal acquisition apparatus which provides real time and/or simultaneous transmission and display of the acquired signals" (Platt, col. 1, lines 4-8). A reader would know that Platt does not perform identification of a QRS complex because Platt explicitly states that "Multiples memories in the apparatus are used . . . to enable output . . . to a PC for analysis" (Platt, Abstract, lines 13-15).

Similarly, Carter is entitled a "Body Monitoring Apparatus". In this regard, "Physiological data . . . may

be displayed upon a front panel 12 and/or transmitted to a remote station . . . (such as, for example, a personal computer" (Carter, col. 2, lines 13-19). The "monitoring device 2 may respond to the physiological data directly to produce an alarm" (Carter, col. 2, lines 19-20), such as a disconnected lead, but there is no effort to identify a QRS complex.

In addition, the claimed "processing element . . . adapted to identify a QRS complex" provides functionality not available within Platt or Carter or the combination of Platt and Carter. For example, once the QRS complexes have been identified, "The CPU 30 may use RR intervals (i.e., the time interval between corresponding R-waves in the successive QRS complexes) and the location of any pacer spikes in order to decide which beat type predominates . . . Contour interpretation and rhythm interpretation together constitute the complete interpretation" (specification, par. [0039]). Further, "At any instant, the operator may select and view waveform data 47" (specification, par. [00040]).

Since Platt and Carter (and the combination of Platt and Carter) fail to teach or suggest "a processing element . . . to identify a QRS complex", the combination fails to teach or suggest each and every claim limitation. Since the combination fails to teach or suggest each and every claim limitation, the rejections are improper and should be withdrawn.

Claims 3 and 4 have been rejected under 35 U.S.C. §103(a) as being obvious over Platt in view of Carter and U.S. Pat. No. 5,876,351 to Rhode or. However, Rhode suffers from the same deficiency as Platt and Carter. More specifically, Rhode is limited to the monitoring of

electrocardiograms. In this regard, Rhode states that the "the ECG monitoring device according to the preferred embodiment of the invention is a full-featured ECG device" (Rhode, col. 6, lines 40-43). However, where more complex ECG analysis is required, the ECG data may be transferred to other devices. In this regard, "Outputting of the signal via a serial port permits the acquired data to be sent via cable to a local laptop computer" (Rhode, col. 6, lines 44-47).

Since the combination of Platt, Carter and Rhode fail to provide any teaching regarding identification of QRS complexes, the combination fails to teach or suggest each and every claim limitation. Since the combination fails to teach or suggest each and every claim limitation, the rejections are improper and should be withdrawn.

Claim 5 has been rejected under 35 U.S.C. §103(a) as being obvious over Platt in view of Carter and U.S. Pat. No. 6,292,692 to Skelton et al. However, Skelton et al. suffers from the same deficiency as Platt and Carter. More specifically, Skelton et al. is directed to a medical treatment device with functions under a pass code. Skelton et al. fails to provide any teaching or suggestion of the identification of a QRS complex.

As such, the combination of Platt, Carter and Skelton et al. fail to teach each and every claim limitation. Since the combinations fail to teach each and every claim limitation, the rejections are believed to be improper and should be withdrawn.

Claims 6-12 and 14 have been rejected under 35 U.S.C. §103(a) as being obvious over Platt in view of Carter and U.S. Pat. No. 6,141,584 to Rockwell et al. However, Rockwell et al. suffers from the same deficiency as Platt

and Carter. More specifically, Rockwell et al. is directed to a defibrillator. Rockwell et al. fails to provide any teaching or suggestion of a processor for the identification of a QRS complex.

As such, the combination of Platt, Carter and Rockell et al. fails to teach each and every claim limitation. Since the combination fails to teach each and every claim limitation, the rejections are believed to be improper and should be withdrawn.

Claims 1, 2 and 3 have been rejected under 35 U.S.C. §103(a) as being obvious over Platt in view of Carter and U.S. Pat. No. 6,773,396 to Flach et al. In view of the content of the claims as presently amended, applicant respectfully traverses these rejections.

The deficiencies of Platt and Carter have been noted above. Flach et al. suffers from the same deficiencies as the combination of Platt and Carter.

In this regard, Flach et al. is limited to a telemetry system for ECG signals. Nowhere within Flach et al. is there any mention of any processing element for identifying a QRS complex.

Since Platt, Carter or Flach et al. and the combination of Platt, Carter and Flach et al.) fail to teach a processor adapted to identify a QRS complex, the combination fails to teach each and every claim limitation. Since the combination fails to teach each and every claim limitation, the rejections are improper and should be withdrawn.

Claims 3 and 4 have been rejected under 35 U.S.C. §103(a) as being obvious over Platt in view of Flach et al., Carter and U.S. Pat. No. 5,876,351 to Rhode. However, Rhode suffers from the same deficiency as Platt, Carter and

Flach et al. More specifically, Rhode is limited to the monitoring of electrocardiograms. In this regard, Rhode states that the "the ECG monitoring device according to the preferred embodiment of the invention is a full-featured ECG device" (Rhode, col. 6, lines 40-43). However, where more complex ECG analysis is required, the ECG data may be transferred to other devices. In this regard, "Outputting of the signal via a serial port permits the acquired data to be sent via cable to a local laptop computer" (Rhode, col. 6, lines 44-47).

Since the combination of Platt, Flach et al., Carter and Rhode fail to provide any teaching regarding identification of a QRS complex, the combination fails to teach or suggest each and every claim limitation. Since the combination fails to teach or suggest each and every claim limitation, the rejections are improper and should be withdrawn.

Claim 5 has been rejected under 35 U.S.C. §103(a) as being obvious over Platt in view of Flach et al., Carter and U.S. Pat. No. 6,292,692 to Skelton et al. However, Skelton et al. suffers from the same deficiency as Platt, Flach et al. and Carter. More specifically, Skelton et al. is directed to a medical treatment device with functions, operated under a pass code. Skelton et al. fail to provide any mention of the QRS complex.

As such, the combination of Platt, Flach et al., Carter and Skelton et al. fails to teach each and every claim limitation. Since the combination fails to teach each and every claim limitation, the rejections are believed to be improper and should be withdrawn.

Claims 6-12 and 14 have been rejected under 35 U.S.C. §103(a) as being obvious over Platt in view of Flach et

al., Carter and U.S. Pat. No. 6,141,584 to Rockwell et al. However, Rockwell et al. suffers from the same deficiency as Platt, Flach et al. and Carter. More specifically, Rockwell et al. is directed to a defibrillator. Rockwell et al. clearly fails to provide any teaching or suggestion of the use of a processing element that identifies a QRS complex.

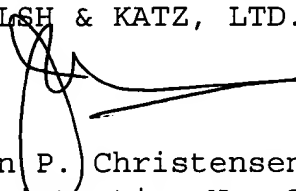
As such, the combination of Platt, Flach et al., Carter and Rockell et al. fail to teach each and every claim limitation. Since the combinations fail to teach each and every claim limitation, the rejections are believed to be improper and should be withdrawn.

Closing Remarks

Allowance of claims 1-14, as now presented, is believed to be in order and such action is earnestly solicited. Should the Examiner be of the opinion that a telephone conference would expedite prosecution of the subject application, he is respectfully requested to telephone applicant's undersigned attorney.

The Commissioner is hereby authorized to charge any additional fee which may be required for this application under 37 C.F.R. §§ 1.16-1.18, including but not limited to the issue fee, or credit any overpayment, to Deposit Account No. 23-0920. Should no proper amount be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 23-0920. A duplicate copy of this sheet(s) is enclosed.

Respectfully submitted,
WELSH & KATZ, LTD.

By 
Jon P. Christensen
Registration No. 34,137

June 13, 2005
WELSH & KATZ, LTD.
120 South Riverside Plaza
22nd Floor
Chicago, Illinois 60606
(312) 655-1500